

§ 431.443

Small electric motor means a NEMA general purpose alternating current single-speed induction motor, built in a two-digit frame number series in accordance with NEMA Standards Publication MG1-1987, including IEC metric equivalent motors.

[74 FR 32072, July 7, 2009, as amended at 77 FR 26638, May 4, 2012]

TEST PROCEDURES

§ 431.443 Materials incorporated by reference.

(a) *General.* The Department incorporates by reference the following standards into subpart X of part 431. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to a standard by the standard-setting organization will not affect the DOE test procedures unless and until the DOE amends its test procedures. DOE incorporates the material as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER. All approved material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. Also, this material is available for inspection at U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, Sixth Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586-2945, or go to http://www1.eere.energy.gov/buildings/appliance_standards/. Standards can be obtained from the sources below.

(b) *CAN/CSA.* Canadian Standards Association, Sales Department, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6, Canada, 1-800-463-6727, or go to <http://www.shopcsa.ca/onlinestore/welcome.asp>.

(1) CSA C747-09 ("CSA C747"), Energy efficiency test methods for small motors, October 2009, IBR approved for §§ 431.444; 431.447.

10 CFR Ch. II (1-1-13 Edition)

(2) CSA C390-10, Test methods, marking requirements, and energy efficiency levels for three-phase induction motors, March 2010, IBR approved for §§ 431.444; 431.447.

(c) *IEEE.* Institute of Electrical and Electronics Engineers, Inc., 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, 1-800-678-IEEE (4333), or go to <http://www.ieee.org/web/publications/home/index.html>.

(1) IEEE Std 112-2004, Test Procedure for Polyphase Induction Motors and Generators, approved February 9, 2004, IBR approved as follows:

(i) Section 6.3, Efficiency Test Method A, Input-Output, IBR approved for §§ 431.444; 431.447;

(ii) Section 6.4, Efficiency Test Method B, Input-Output with Loss Segregation, IBR approved for §§ 431.444; 431.447.

(2) IEEE Std 114-2010, Test Procedure for Single-Phase Induction Motors, approved September 30, 2010, IBR approved for §§ 431.444; 431.447.

[74 FR 32072, July 7, 2009, as amended at 77 FR 26638, May 4, 2012]

§ 431.444 Test procedures for the measurement of energy efficiency.

(a) *Scope.* Pursuant to section 346(b)(1) of EPCA, this section provides the test procedures for measuring, pursuant to EPCA, the efficiency of small electric motors pursuant to EPCA. (42 U.S.C. 6317(b)(1)) For purposes of this part 431 and EPCA, the test procedures for measuring the efficiency of small electric motors shall be the test procedures specified in § 431.444(b).

(b) *Testing and Calculations.* Determine the energy efficiency and losses by using one of the following test methods:

(1) Single-phase small electric motors: Either IEEE Std 114-2010 or CSA C747 (incorporated by reference, see § 431.443);

(2) Polyphase small electric motors less than or equal to 1 horsepower (0.75 kW): Either IEEE Std 112-2004 Test Method A or CSA C747 (incorporated by reference, see § 431.443); or

(3) Polyphase small electric motors greater than 1 horsepower (0.75 kW): Either IEEE Std 112-2004 Test Method